UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/837,341	04/19/2001	Koichi Matsuda	206230US6	8554

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EXAMINER
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ART UNIT	PAPER NUMBER
2144	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 December 2004</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>2-5</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>2-5</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>19 April 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   The response mailed on 12/02/2004 has been entered. Claim 1 is

cancelled and claims 2-5 remain pending in this application.

Claim Objections

2.   The disclosure is objected to because of the following informalities:

In Claim 2, the inventive entity recites, "said inputting means"(claim 2

claim lines 8-9). The examiner presumes that the intention of the

inventive entity is just an attempt to refer to the language previously

defined in the claim, which read as "inputting unit" (claim 2 claim line 5).

Thus, "said inputting ~~means~~" should be corrected to read as ""said

inputting **unit**"

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the

basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made to a
> person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 2, 4 and 5 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Grayson et al. (U.S. Patent Number 5,963,217)

hereinafter referred to as Grayson in view of Gemmel et al. (U.K. Patent

Appl. No. GB2128786A) hereinafter referred to as Gemmel.

As per claim 2:

An information processing apparatus connected to a server along with other information processing apparatuses through a network and which is supplied with a shared virtual space, said information processing apparatus comprising: [See Figs. 1, 3 and 6, Col. 2, Lines 62-64. Grayson disclosed a chat communication system having therein a server/host connected to plurality of apparatuses/client communication devices].

an inputting unit configured to allow a user to input strings of characters constituting a chat carried on via an avatar which is active in said shared virtual space as an incarnation of said user; [Col. 1, Lines 46-60 and Col. 8, Lines 29-41, Grayson discussed a conventional electronic conference, inputting text messages via the inputting unit in order to converse with another party in the network]

a transmitting unit configured to transmit said strings of characters input through said inputting means to said server as character data; [Col. 2, Lines 46-64 and Col. 3, Lines 14-26]

a converting means for converting said character data coming from said server into audio data [Col. 3, Lines 14-26]

an output configured to audibly output said audio data converted by said converting means. [Col. 3, Lines 14-26 and Col. 4, Lines 52-58].

Grayson substantially disclosed the invention as claimed. However,

Grayson was silent about a medium storing a correspondence table

storing a correspondence table having therein character data mapped to

the audio data; and accordingly converting the character data/text

entered into the matching audio data.

Now, as evidenced by the teachings of Grayson, converting a text

string entered by a user at a communication terminal been converted to

a corresponding audio message via the text-to-speech processor and

outputted on the second party communicating with the first part through

the second communication terminal (Col. 4 Lines 14-58) was known in

the art at the time the invention was made. Having that said, the

significant importance of the claimed invention and the disclosed

teachings of Grayson is the end-result; that is to say converting the text

entered by a first client in communication with the second client in the

network into a sound and outputting the converted message to the

second user through the means of an avatar. Since both the claimed

invention and the teachings of Grayson produce the same result (text-to-

speech conversion in a chat session), it is extraneous whether one uses a

table to map the text to sound or simply use a different form of data

structure in mapping the text entered to the corresponding audio sound

which does not change the end-result or scope of the invention as

claimed. Furthermore, since the use of a table or a file to convert or

compute different data in the art·of database was known in the art, it would have been an arbitrary choice to one of ordinary skill in the art when reducing such an invention to practice. In this art, <u>Gemmel</u> disclosed an information processing apparatus that uses dictionaries (correspondence tables) to map character data to audio data. Subsequently, the audio data is converted to audio output utterance by means of a text to speech synthesizer. (Page 2, Lines 13-22).

Thus, it is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the alternative teachings of <u>Gemmel</u> related to the use of correspondence tables (dictionaries) for storing and converting text input to audio data output to improve performance and reliability. (Page 1, Lines 9-18 and page 2, Lines 13-22) and further to make use of alternative file or a table when mapping the text entered by a user to a corresponding sound in the process of text-to-speech conversion and have modified the teachings of <u>Grayson</u> related to a chat session converting a text entered by a user to audio at the receiving party via an avatar in order to reduce latency and to allow communication using in a low bandwidth without using excessive resources. See <u>Grayson</u> Col. 1, Lines 46-63 and Col. 2, Lines 51-53.

5.   Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Grayson</u> et al. (U.S. Patent Number 5,963,217) in view of <u>Gemmel</u> et

al. (U.K. Patent Appl. No. GB2128786A) and further in view of <u>Sugiyama</u> et al. (U.S. Patent Number 6,345,245) hereinafter referred to as <u>Sugiyama</u>.

With respect to the rejection applied to claim 2 above, the already combined teachings of <u>Grayson</u> and <u>Gemmel</u> substantially disclosed the invention as claimed. however, failed to teach "a correspondence table updating means which, in a response to a query from the server, transmits to said server an ID representing a type of said correspondence table stored in said corresponding table storing means, wherein, if said server returns an updated correspondence table in response to said ID transmitted thereto, then said correspondence table updating means stores said updated correspondence table into said corresponding table storing means".

In these arts, <u>Sugiyama</u> disclosed a method and computer program media that uses information processing apparatus that meets the functional limitation of claim 3 as summarized below:

Sugiyama transmits a "local user dictionary tag" identifying the local dictionary/correspondence table in response to a query from the common dictionary manager (server). Sugiyama's common dictionary (correspondence table) manager performs a comparison test against the local dictionary (correspondence table)

and transmits appropriate edits (updates) to the corresponding "local user dictionary tag" if mismatched. (Col, 6 Line 1 through Col. 7 , Line 1 2).

Thus, it would have been obvious to one of ordinary skill in the art to take the teachings of <u>Sugiyama</u> related to updating dictionary tables and have modified the already combined teachings of <u>Grayson</u> and <u>Gemmel</u> to obtain an automated and flexible means of managing dictionaries (correspondence tables) on a plurality of information processing apparatus.

6.   Claims 4 and 5, have substantially similar functional limitations as of claim 2 above, and both are rejected with the same rationale.

Response to Arguments

7.   Applicant's arguments filed 12/02/2004 have been fully considered but they are not persuasive.

The inventive entity argues, that the teaching of <u>Gemmel</u> fails to teach the audio data been stored in a table. (Applicant's Remark on Page 6, Last ¶).

However, with respect to the rejection made to claim 2 above, the data/information stored in the table being of a particular type (such as audio as claimed) does not affect the operation of the table or the conversion of data. The type of data stored in the table is given little patentable weight as it is nonfunctionally descriptive

information. Table/database store data and the type of data stored in the table is not given much patentable weight since one can expect that table/database will store any type of data;

> *Nonfunctional descriptive material cannot render nonobvious an invention that would have otherwise been obvious. Cf. In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983) (when descriptive material is not functionally related to the substrate, the descriptive material will not distinguish the invention from the prior art in terms of patentability)."*

Besides, the teachings of The already combined teachings of Grayson and Gemmel disclosed converting text message sent via a chat session into an audio and outputted the audio result to the second user in communication with the first user (Col. 4, Lines 52-57). Since a table or other type of storing data means are commonly known, it would have been an arbitrary choice to one of ordinary skill in the art to make use of a table or a file in order to achieve a common result (text-to-speech conversion).

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a.   <u>Liles</u> et al. (US 5880731 A) entitled: "Use of avatars with automatic gesturing and bounded interaction in on-line chat session"

b.   Brush et al. (US 5884029 A) entitled: "User interaction with intelligent virtual objects, avatars, which interact with other avatars controlled by different users"

c.   Rekimoto (US 5956038 A) entitled: "Three-dimensional virtual reality space sharing method and system, an information recording medium and method, an information transmission medium and method, an information processing method, a client terminal, and a shared server terminal"

d.   Lection et al. (US 5983003 A) entitled: "Interactive station indicator and user qualifier for virtual worlds"

e.   Honda (US 6020885 A) "Three-dimensional virtual reality space sharing method and system using local and global object identification codes"

f.   Leahy et al. (US 6219045 B1) entitled: "Scalable virtual world chat client-server system"

g.   Prevost et al. (US 6384829 B1) entitled: "Streamlined architecture for embodied conversational characters with reduced message traffic"

h.   Dutta et al. (US 6453294 B1) entitled: "Dynamic destination-determined multimedia avatars for interactive on-line communications"

i.   Hatlelid et al. (US 6772195 B1) entitled: "Chat clusters for a virtual world application"

Non-Patent Literature

j.   Szadkowski, Joseph "NTT Corp. pioneers 3-D interactive
environment" Washington Times. Washington, D.C.: Jun 8, 1998.
p. D.8

k.   Guly, Christopher "Now Internet chat room fiends can get a
virtual life". The Ottawa Citizen. Ottawa, Ont.: Jan 31, 2000. p. A.5

l.   P.J. Huffstutter "Think Chat Is Flat? Firm Offers 2-D
Personal 'Rooms' on Web" Los Angeles Times. Los Angeles, Calif.:
Sep 29, 1997. p. 1

9.   Applicant's amendment necessitated the new ground(s) of rejection
presented in this Office action. Accordingly, **THIS ACTION IS MADE
FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of
time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to
expire THREE MONTHS from the mailing date of this action. In the event
a first reply is filed within TWO MONTHS of the mailing date of this final
action and the advisory action is not mailed until after the end of the
THREE-MONTH shortened statutory period, then the shortened statutory
period will expire on the date the advisory action is mailed, and any
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the
mailing date of the advisory action. In no event, however, will the

statutory period for reply expire later than SIX MONTHS from the date of this final action.

10.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yemane M. Gerezgiher whose telephone number is (571) 272-3927. The examiner can normally be reached on 9:00 AM - 6:00 PM Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached at (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Yemane M. Gerezgiher
Patent Examiner, Computer Science

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SUPERVISORY PATENT EXAMINER
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